State of New Jersey
Department of Environmental Protection

DONALD T. DIFRANCESCO
Acting Governor

Robert C. Shinn, Jr.
Commissioner

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. 7000 1670 0013 7837 0565

AUG 23 2001

Mr. Cristopher Anderson
Director Environmental Affairs
L.E. Carpenter & Company
Suite 36-5000
200 Public Square
Cleveland, OH 44114-2304

Dear Mr. Anderson:

Re: L. E. Carpenter Superfund Site
Wharton, Morris County

The New Jersey Department of Environmental Protection (Department) and EPA have reviewed the Work Plan for Supplemental Investigation of Natural Attenuation of Dissolved Constituents in Groundwater, dated May 2001 and have the following comments:

1. The work plan states that wells will be drilled using air-rotary techniques. For shallow wells such as these, EPA prefers hollow stem auger methods. If these have proved problematic in the past, then air-rotary is acceptable.

2. When surveying new wells, please include the ground surface elevation next to each well. The work plan also should mention that the wells will be located horizontally. It is assumed that this method is intended, but the text does not clearly state it.

3. Analyses for ethene and ethane are typically included to evaluate the breakdown of chlorinated solvents. Their utility here is unclear.

4. Natural attenuation parameters should be collected quarterly. This will allow for the evaluation of any trends, as well as possible seasonal variations.

5. Ferrous iron concentrations typically change quickly after a sample is removed from the subsurface. These analyses should be conducted in the field using a test kit.

6. Turbidity should be added to the list of field parameters to be measured during sampling events. This provides an additional check on field parameter stability and

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aids in documenting that a well is properly developed/not damaged at the time of sample collection.

7. Summary water levels should be collected across the site in conjunction with the sampling events.

8. As stated in the text, preliminary inputs to the ground water model should be discussed and agreed upon prior to initiating work on the model. Degradation rates will be very difficult to accurately define, leaving considerable uncertainty in the resulting natural attenuation time frames. Much of the value from the modeling will lie in runs that do not include a degradation term. If degradation is important, these runs should show that the plume has not migrated the distances expected without degradation. Please be sure to include this in documenting the results. Actual forward projections will be viewed only as estimates, the accuracy of which are qualified by the uncertainty of inputs.

9. The Department had commented that L.E. Carpenter did not incorporate the then latest sampling results of 1600 ppb DEHP in its screening model, but rather a value of 670 ppb. The Department believed that by using the higher number in the model, perhaps the model would predict that natural attenuation of the dissolved plume is less likely or incomplete. L.E. Carpenter responded that the point of the figure is to indicate the spatial distribution of contamination. This response is unclear. The point of the Department's comment was to use the most representative values in the modeling effort, not to draw a correct map. Accordingly, in any future modeling efforts, L.E. Carpenter must employ the most conservative sampling results, given the uncertainties in the other input parameters.

10. The document indicates that a three-dimensional model will be constructed to evaluate natural attenuation at the site. Please note that the applicable ASTM modeling standards must be followed in any modeling efforts and in reporting the results.

11. L.E. Carpenter proposes to install two additional wells to complete plume delineation in the MW-14 area. The Department believes that the proposed well MW-28 is redundant to MW-14S and will serve no useful purpose. The Department requests that L.E. Carpenter re-evaluate the location of this proposed well.

12. There appears to be no advantage in locating a well between MW-3 and MW-14S. Most likely contamination will be found at MW-27 comparable to MW-22R.

A revised document incorporating all the above comments must be submitted within sixty (60) calendar days from receipt of this letter in accordance with paragraph 15 of the September 26, 1986 Administrative Consent Order (ACO). Failure to submit the document within this timeframe may result in stipulated penalties as per paragraph 40 of the ACO.

If you have any questions, please contact me at (609) 633-7261.

Sincerely,

Gwen B. Zervas, P.E.
Section Manager
Bureau of Case Management

C: Nick Clevett, RMT
Stephen Cipot, EPA
George Blyskun, BGWPA
John Prendergast, BEERA